

WHAT IS CLAIMED IS:

1. An ignition device for igniting a foil cartridge (10) in an explosion-operated power tool, comprising;

a support (8);

an electrical insulator (24) arranged in the support (8);

a pin-shaped electrode (25) located in the electrical insulator and having a tip (30) that communicates with surrounding environment via a channel (32) formed in the electrical insulator (24) and extending in a longitudinal direction of the pin-shaped electrode (25); and

an electrically conducting annular electrode (27) supported on the support (8) in a region of the channel (32), the annular electrode (27) tightly surrounding the insulator (24), leaving the channel (32) free.

2. An ignition device according to Claim 1, wherein the insulator (24) has a conical section (34) a cone angle (α) of which opens in a direction toward the channel (32).

3. An ignition device according to Claim 2, wherein the pin-shaped electrode (24) has a conical section (31) a cone angle (β) of which opens in a direction toward the channel (32).

4. An ignition device according to Claim 3, wherein the cone angle (β) of the electrode conical section (31) is smaller than the cone angle (α) of the insulator conical section (34).
5. An ignition device according to Claim 1, wherein a circumferential wall of the channel (32) is formed by a sleeve (26) located in the insulator (24) and formed of a temperature-stable material.
6. An ignition device according to Claim 5, wherein the sleeve (26) is formed of ceramics.
7. An ignition device according to Claim 1, wherein the annular electrode (27) is formed as a cover and has, at its side remote from the insulator (24), a convex bulge.
8. An ignition device according to Claim 1, wherein the annular electrode (27) is secured on the support (8) by spiral thread means (39, 40).
9. An ignition device according to Claim (8), wherein the spiral thread means (39, 40) have axial play.